REMARKS/ARGUMENTS

Claims 1–19 are pending in the captioned application. Claims 2–4 and 14–19 are withdrawn from consideration.

Applicant acknowledges that the Examiner has ruled Applicant's traversal on the Restriction Requirement presented in the previous response to an Office Action as being not persuasive. Accordingly, claims 2–4 and 14–19 are withdrawn from consideration. Applicant will cancel the non-elected claims as soon as Notice of Allowability of the elected claims is received.

The Examiner has objected to the specification stating, "the use of the trademark CYTODEX and SEPHADEX has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology".

In response, Applicant has amended the specification as the Examiner has suggested. Applicants have also amended the drawings to reflect the correct use of the trademarks. Applicants believe that the specification is now in proper form.

The Examiner has rejected claims 1 and 1–13 under 35 U.S.C. § 112, second paragraph, as "being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention". Specifically, the Examiner states, "claim 1, step i) is vague and indefinite in reciting, 'cells adhering to support particles' because it is unclear if Applicant intends for specific cell populations to form a complex, i.e. attached or bound or adhered, with the support particles. See also step ii)".

The Examiner continues, "claim 1, step i) is confusing because it is unclear what functional cooperative relationship exists between 'the one or more different populations of cells' and 'the support particles' upon which the cell populations adhere. First, it is unclear how the different populations of cells differentially and specifically, adhere or attach to the support particles to thus obtain different populations of cells since it appears that Applicant intends for the different populations to be subsequently separated into separate reaction vessels in step ii). Please clarify".

The Examiner further continues, "claim 1, step i) is vague and indefinite in reciting, 'support particles ... being adapted for cell growth' because it is unclear how the support particles are modified or adapted to support cell growth".

In response, Applicant has amended claim 1 to read "providing one or more different populations of cells growing on support particles". Support for this amendment is proved at page 8, lines 4–6, and entry of the amendment is respectfully requested.

Applicants respectfully assert that this amendment overcomes the rejections by the Examiner presented above.

The Examiner has stated, "claim 1, step iii) is ambiguous in reciting, 'said radiolabeled reagent to become associated with said cells' because it is unclear what Applicant intends to encompass in reciting 'associated' as used in the claim, i.e. bind, attach, adjacent, etc. See also claim 7".

In response, Applicant respectfully disagrees and asserts that one skilled in the art would understand what is meant by the term "associated". Specifically, the instant invention can be utilized to investigate a broad array of biological processes using the "radiolabelled reagent: which can be covalently bound, non-covalently bound, incorporated, metabolized, transported, excreted, or otherwise processed by the living cells. Thus, Applicants respectfully assert that the claim is not ambiguous, but is intended to encompass a wide array of determinations enabled in the specification.

In view of the foregoing, Applicant respectfully asserts the Examiner's rejections cannot be sustained and should be withdrawn.

The Examiner also states, "claim 1, step iv) lacks clear antecedent basis In reciting, 'the scintillant particles'".

In response, Applicant has amended this recitation to read "support particles including a scintillant substance".

Applicant respectfully asserts that this amendment overcomes the Examiner's rejection.

The Examiner has objected to claim 5 stating, "it is unclear as to whether 'the different samples of each of said cells' still comprise different populations of cells".

In response, Applicant has amended claim 5 to state that said separate best reaction vessels include one or more different populations of cells.

Applicant respectfully asserts that this amendment overcomes the Examiner's rejection.

In view of the foregoing, Applicant respectfully asserts that the above amendments and arguments overcome the Examiner's rejections which should be withdrawn.

The Examiner has rejected claims 1 and 5–13 under 35 U.S.C. § 102(e) as "being anticipated by Jessop (US Patent 6,524,786)". Specifically, the Examiner states, "Jessop discloses scintillation proximity assays performed in multiwell plates wherein a charge-coupled device (CCD) is used in a detection step to image cellular processes in living cells...Jessop teaches providing one or more different populations of living cells which are attached to support particles capable of cell growth (particulates or beads) and carrying a scintillant substance (phosphor). In practice, Jessop teaches introducing the cells attached to scintillant particles in a medium, to massive surfaces such as separate vessels or wells of a microtiter plate...Thereafter, radioisotope-labeled reagent is added to the wells so as to monitor uptake (association) of the radioisotope by the cells in real time or dynamic mode".

The Examiner continues, "cellular processes are measured by detecting light emission from the scintillant support particles as caused by the radioactive decay of the radioisotope label...Different concentrations of radioisotope label are incubated with different samples of cells in reaction vessels...Jessop provides that detection step may be performed by scintillation counting..."

In response, Applicant respectfully disagrees, and respectfully asserts that the recitation in claim 1 (and all claims dependent thereon) provides that said populations of cells are "growing on support particles" is neither disclosed nor even suggested by the Jessop reference. Indeed, the Jessop reference discloses only (at column 3, lines 20–22), the tests may involve a study of living cells, which are, or which may become, attached to the surface carrying the phosphor. There is no disclosure or even suggestion of growing the cells directly upon the support particles. Such is only attainable by the methodology of the instant invention.

In view of the foregoing, Applicant respectfully asserts the Examiner's rejections cannot be sustained and should be withdrawn.

Applicant acknowledges the art cited by the Examiner as "pertinent to the applicants' disclosure", but declines to comment as it has not been used as a rejection.

In view of the foregoing, Applicant respectfully asserts the Examiner's rejections cannot be sustained and should be withdrawn. Applicant believes that the claims, as amended, are in allowable form and earnestly solicit the allowance of claims 1 and 5–13.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on September 15, 2004.

Signature:

Name: Melissa Leck

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Amendments to the Drawings:

The attached sheets of drawings include changes to Figures 1 through 4. These sheets replace the original figures. In Figures 1 through 4, the titles have been corrected to reflect the capitalization of the trademarks, CYTODEX and SEPHADEX and is now accompanied by the generic terminology.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

Figure 1: Uptake of [^{35}S]Methionine into CHO cells grown on ~~Cytodex~~ CYTODEX™ Microcarrier Beads containing Yttrium Oxide (YOx) +/– Cycloheximide

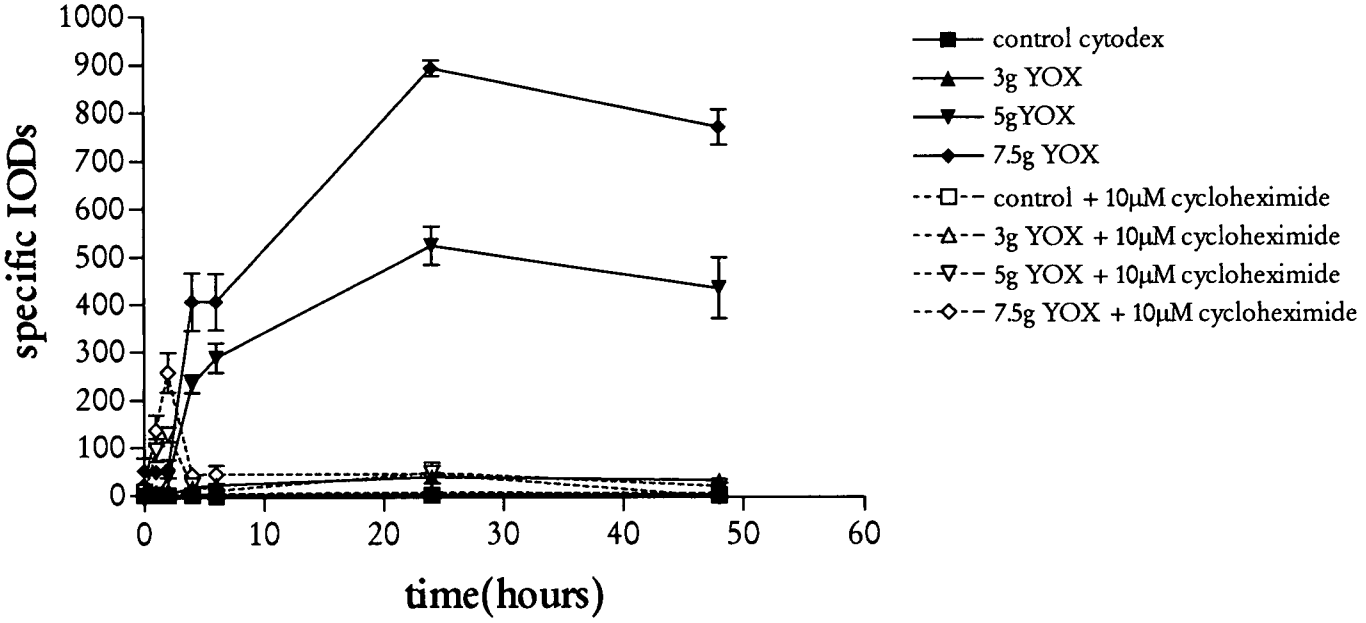

Figure 2: Uptake of [^{14}C]Methionine into CHO cells grown on ~~Cytodex~~ CYTODEX™ Microcarriers containing Yttrium Oxide (YOx)

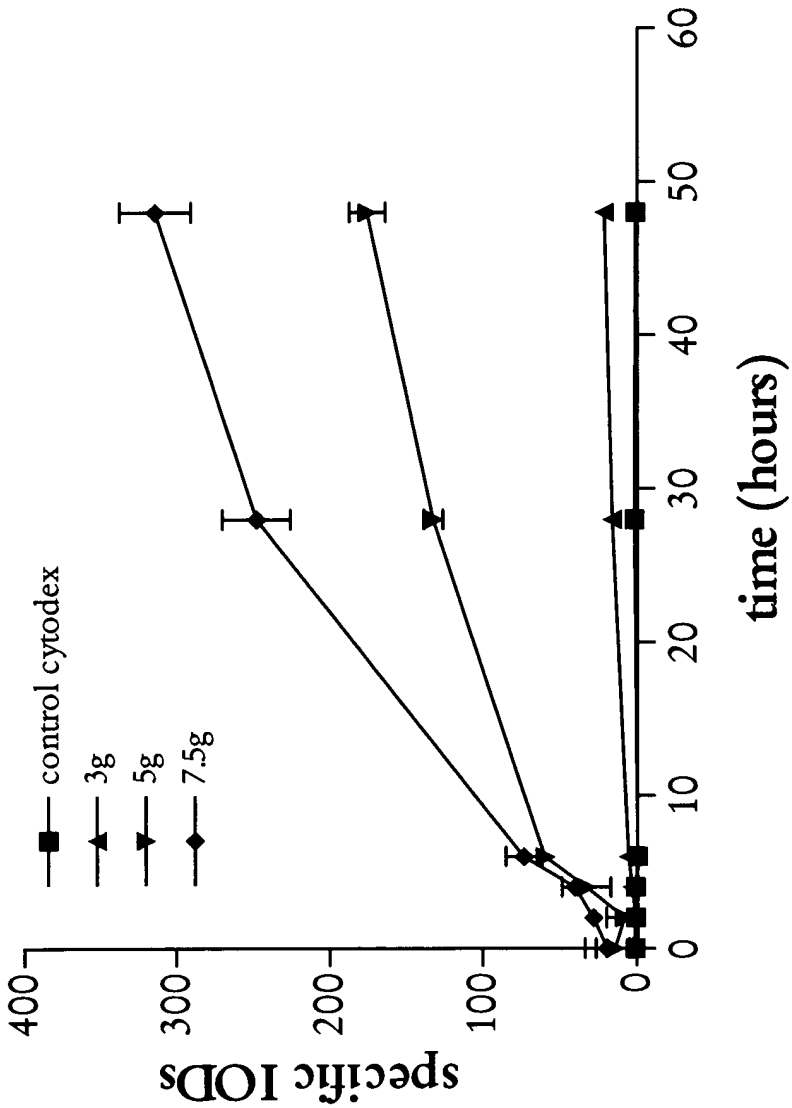

Figure 3: Uptake of [^{3}H] Methionine into CHO cells grown on ~~Cytodex~~ CYTODEX™ Microcarriers containing Yttrium Oxide (YOx)

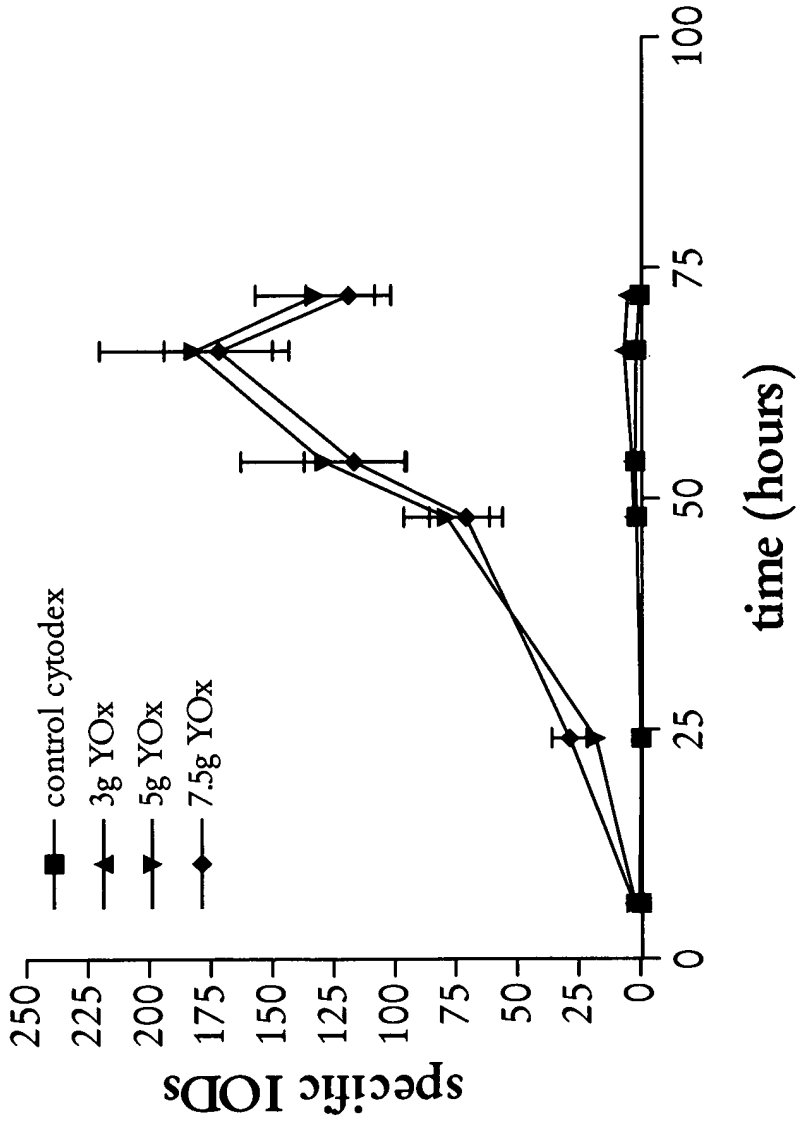

Figure 4: Incorporation of [^{35}S]methionine into CHO and HeLa cells growing on ~~Cytodex~~ CYTODEX™ - YOX Microcarriers ~~microcarriers~~